

03 18

SEP 60 PR PR

14/7302  
SEP 60  
XPM 081930

NO

HQ ADC PETERSON AFB CO//XP//

HQ USAF WASH DC//RDS//

INFO HQ SAC OFFUTT AFB NE//ZX//

HQ AFSC ANDREWS AFB MD//SD//

HQ SD LOS ANGELES AFS CA//Y6//

HQ USAF WASH DC//RDSB/XOORS/XOXFB/PAXIB/LEXP/XOKS//

SUBJ: DSP MISSION AVAILABILITY

1. REFERENCE: YOUR MESSAGE, 042225Z SEP 60, SAME SUBJECT.

2. ~~EACH SUBPARAGRAPH BELOW CORRESPONDS TO THE QUESTIONS IN~~  
PARAGRAPH 3 OF YOUR MESSAGE:

A. THE 38-FOOT ANTENNA CAN BE MOVED TO THE OGS. AN ANTENNA PAD  
IS REQUIRED AS WELL AS SPACE FOR THE SPS SATELLITE COMMUNICATIONS  
MODULE (SCH).  
b1

ALTERNATIVELY, A NEW INTERFACE BE-  
TWEEN THE ANTENNA AND THE OGS TECHNICAL FACILITY COULD BE ENGINEERED.  
IN EITHER CASE, THE ANTICIPATED SCHEDULE WOULD BE APPROXIMATELY 8-12  
MONTHS, FOLLOWING COUNTRY-TO-COUNTRY AGREEMENT. THE OVERSEAS USE OF  
THE SPS ANTENNA WOULD:

(3) DELETE THE OPERATIONAL CAPABILITY OF THE SPS

NORMAN W. MACCARI, MAJ, XPM, 3201

NO

(2) IMPACT THE CURRENT SAC O&M AND TECHNICAL SERVICES CONTRACTS AND ON-GOING SPO DEVELOPMENT EFFORTS, RESULTING IN HIGHER COSTS.

(3) ADD NON-AFLC SUPPORTED EQUIPMENT TO THE OGS CONFIGURATION

B. THE 15-FOOT ANTENNA CAN BE MOVED TO OGS. NO PAD WOULD BE REQUIRED; HOWEVER, SINCE THE OGS LIES IN A GROUND DEPRESSION, THE ANTENNA MAY HAVE TO BE REMOTELY LOCATED TO A HIGHER ELEVATION, OR A RAISED PLATFORM (APPROX 40 FEET) ABOVE OGS GROUND LEVEL TO ASSURE AN ADEQUATE LINE-OF-SIGHT-ANGLE-TO-THE-DSP-SATELLITE. WITH THE 15-FOOT ANTENNA, BOTH LINK 1 AND LINK 2 SIGNAL STRENGTHS WOULD BE QUESTIONABLE. FOR CGS, THE LINE-OF-SIGHT AND LINK MARGIN PROBLEMS WOULD NOT EXIST. FOR EITHER CASE, THE ALTERNATE SCH AT IBM WESTLAKE OR A NEW ENGINEERING EFFORT WOULD BE NEEDED TO INTERFACE THE ANTENNA TO THE TECHNICAL FACILITY. ESTIMATES AGAIN ARE 8-12 MONTHS. MOVING THE 15-FOOT ANTENNA TO CGS OR OGS WOULD:

(1) 51

(2) REDUCE THE CAPABILITY TO TEST SPS SOFTWARE/HARDWARE AT WESTLAKE

(3) IMPACT THE SAC O&M AND TECHNICAL SERVICES, AND SPO-

MAJ MACCARI

03 10

REF 00 PP 00

NO

DEVELOPMENT CONTRACTS.

{4} ADD NON-AFLC SUPPORTED EQUIPMENT TO THE CES/SES CONFIGURATION.

C. OTHER THAN THE SPARE 38-FOOT ANTENNA STORED AT PUEBLO, CO.

b1

THERE ARE NO OTHER RESOURCES KNOWN

TO BE AVAILABLE.

D. THE PROBLEMS ASSOCIATED WITH ANTENNA MOVEMENT ARE STATED ABOVE. THE 8-12 MONTH SCHEDULE ESTIMATE MAY BE FURTHER PROLONGED BY COUNTRY-TO COUNTRY AGREEMENT REQUIREMENTS.

E. ~~AIR FORCE SYSTEMS COMMAND SHOULD SUPPLY THE ANSWER TO THIS QUESTION; HOWEVER, TO THE BEST OF OUR KNOWLEDGE, BASIC EQUIPMENT INCOMPATIBILITIES WOULD NOT ALLOW THE USE OF THE DSCS ANTENNA. IF THESE PROBLEMS CAN BE RESOLVED, THE FOLLOWING OPERATIONAL COMMUNICATIONS CAPABILITIES WOULD NEVERTHELESS BE LOST WHILE THE DSCS ANTENNA IS IN USE:~~

{1} b1

{2} b1

{3} b1

{4} b1

{5} AUTOBIN COMMUNICATIONS

MAJ MACCARI

04 10

SEP 80 PP PP

NO

(6) BOTH GP AUTOVON LINES.

(7) THE TECHNICAL CONTROL ORDER WIRE, PLUS

(8)

b1

F. THE LEVEL OF PREVENTIVE MAINTENANCE NOW BEING PERFORMED IS CONSIDERED TO BE THE MINIMUM NECESSARY TO PRECLUDE DECREASES IN OPERATIONAL AVAILABILITY. THE TOTAL AT OCS, FOR EXAMPLE, b1

INCLUDES:

(1) RECEIVER PHASING - A SERIES OF ANGLE/TRACK RESPONSE

---TESTS PERFORMED---

b1

TO LOOK FOR PHASE ERRORS

(2) RANGING - AN INFREQUENT, BUT NECESSARY, CHECKOUT OF THE DIGITAL RANGING EQUIPMENT

(3) LUBRICATION OF VARIOUS MOVING PARTS OF THE ANTENNA

(4) SAFETY INSPECTIONS WITHIN THE ANTENNA CONTROL SECTION

(5) CHECKS BY CIVIL ENGINEERING

b1

ON

ELECTRONIC SWITCHING GEAR

(6) CHECKS BY CIVIL ENGINEERING ON THE SYSTEM GROUNDING CAPACITIES

G. NO. DURING MOST PREVENTIVE MAINTENANCE ACTIVITIES, FREQUENT MOVEMENT OF THE ANTENNA IS A NECESSARY FACTOR OF THE MAINTENANCE.

RAJ MACCARI

b1

**MANUAL POINTING IS**

**A MANUALLY INTENSIVE EFFORT THAT WOULD NOT DECREASE DOWNTIME.**

H.

b1

**IN ADDITION, MODIFICATIONS TO THE  
CURRENT TECHNICAL SERVICES AND O&M CONTRACTS WOULD BE REQUIRED ALONG  
WITH ANY ASSOCIATED COST INCREASES.**

I.

b1

MAJ NACCARI

20

SEP 30 19 49

b1

J.

b1

MAJ NACCARI

07 20

SEP 80 PP PR

NO

K. ALL OF THE FOLLOWING COULD BE TRANSFERRED TO ANOTHER COMPUTER IF AVAILABLE AND APPROPRIATELY EQUIPPED (PERIPHERALS, CONSOLES, SWITCHES, ETC)

- (1) SOFTWARE DEVELOPMENT AND MAINTENANCE
- (2) COMPUTER PREVENTIVE/CORRECTIVE MAINTENANCE (ASSUMING THE ADDITIONAL COMPUTERS CAN BE SWITCHED ON-LINE)
- (3) TRAINING (OPERATIONS/PROGRAMMING/MAINTENANCE)
- (4) JCS/HIGHER HQ SOURCE-TO-USER TESTING/EXERCISES
- (5) PROBLEM ANALYSIS AND STATISTICAL GATHERING

~~NO OTHER FACILITIES CURRENTLY EXIST WITH ENOUGH SPARE COMPUTER TIME~~  
TO SUPPORT THESE FUNCTIONS. THIS IS THE MAIN REASON. ~~OTHER THAN CON-~~  
~~VENIENCE~~ THAT THEY ARE NOW PERFORMED ON-SITE WITHIN EXISTING RE-  
SOURCES.

L. THE NEW LPSU STRINGS WILL NOT BE CONFIGURED SO THAT EITHER IBM 2083 CAN PERFORM EITHER THE PREPROCESSOR OR CENTRAL PROCESSOR ROLE. THE CONTRACTOR SHOULD BE ADDRESSED THROUGH AFSC TO DETERMINE WHAT WOULD BE NEEDED. IT IS POSSIBLE THAT THE CURRENT FACILITIES WOULD HAVE TO BE EXPANDED AND ADDITIONAL POWER/COOLING/ AND PERSONNEL NEEDED.

M. WHEN COMPARED ON A COMMON BASIS, CGS AND OCS AVAILABILITY

MAJ NACCARI

08 10

SEP 80 PP PP

NO

WOULD BE NEARLY EQUIVALENT WITH OGS HAVING A SLIGHTLY BETTER RECORD.

THIS VARIANCE CAN BE ACCOUNTED FOR IN TWO WAYS:

(1) AUSTRALIAN NATIONALS AT OGS PROVIDE EXTENSIVE CONTINUITY OF EXPERTISE IN THE MAINTENANCE, AND OPERATIONS OF THE DRC, TOR, AND SATCOM TERMINALS.

(2)

b1

N. MAINTENANCE SCHEDULING FOR THE ENTIRE MISSILE WARNING SYSTEM IS HANDLED IAW ADCMR 55-90, WHICH CAN BE MADE AVAILABLE IF REQUIRED AND FOLLOWS THESE SCHEDULING CRITERIA:

(1) INITIAL PLANNING IS DONE MANUALLY AT EACH SITE WITH RANDOM SCHEDULES TO DISALLOW ENEMY ANTICIPATION.

(2)

b1

(3)

b1

(4)

b1

O. THIS QUESTION IS BETTER ADDRESSED BY SAC, HOWEVER, OPERA-

MAJ MACCARI



09 10

SEP 68 PP PP

NO

TIONAL AVAILABILITY DATA WILL BE ON HAND FOR THE MEETING ON THE 12TH.

P. THE RULES FOR SYSTEM OPERATIONAL STATUS DETERMINATION ARE FOUND IN ADCMR 55-55, VOL I. GENERALLY SPEAKING, THEY ARE BASED ON THE DEGREE OF DEGRADATION OF EITHER MISSION DATA DETECTION CAPABILITY, MISSION PROCESSING CAPABILITY, MISSION REPORTING CAPABILITY, OR COMBINATIONS IN DEGRADATION THEREOF. A COPY OF 55-55, VOL I, WILL BE BROUGHT TO THE MEETING IF DESIRED.

Q

b1

R. TO THE BEST OF OUR KNOWLEDGE, A BENT-PIPE ARRANGEMENT WOULD NOT BE POSSIBLE DUE TO THE DIFFERENCES IN DATA RATES INVOLVED; HOWEVER, AFSC SHOULD PROVIDE A DEFINITIVE ANSWER.

S. SAC AND SACCA ARE IN THE PROCESS OF DEVELOPING APPROPRIATE OPERATIONAL PLANS TO MOVE THE SPS b1 WITH ALL THE NECESSARY ARRANGEMENTS YET TO BE MADE, OUR ESTIMATE WOULD BE 18 MONTHS BEFORE THE SITE WOULD BE READY TO MOVE. WE DO NOT RECOMMEND SUCH A MOVE, HOWEVER, UNTIL AFTER COMPLETION OF THE CGS PORTION OF THE LPS COMPUTER UPGRADE (MID 1968), THE SPS SHOULD BE USED DURING BOTH THE CGS AND OGS PORTIONS OF THE UPGRADE TO COVER ANTICIPATED, EXTENSIVE

MAJ. NACCARI

HQ

## PERIODS OF REDUCED PROCESSING CAPABILITY.

3. THE FOLLOWING PERSONNEL WILL BE IN ATTENDANCE AT HQ USAF FROM HQ ADC ON 12 SEP 80 TO FURTHER AMPLIFY AS NECESSARY ON THESE ANSWERS:

- A. MAJOR NORMAN W. MACCARI, 66 TOP SECRET, HQ ADC/KPD.  
CADC POINT OF CONTACT, AV 692-12013.
- B. MAJOR LESTER W. NELSON, 66 TOP SECRET, HQ ADC/DOF.
- C. CAPTAIN LARRY W. BRYANT, 66 TOP SECRET, HQ ADC/DOF.

MAJ MACCARI